



ROLE PROFILE

Position title: InSAR Scientist	Position number: 17910
Division/Branch: CSEMD	Project/Section: Geodesy
Functional stream: Science	Reports to: Team Leader, InSAR
Classification: APS 6	Salary: APS6 \$78,070 - \$90,369
Security level: Police Check Only	Employment type: Non-ongoing
Location: Symonston, Canberra	Duration (if non-ongoing): 3 years
Note: This position is available on a full time or part time basis.	

The organisation:

Geoscience Australia is an Australian Government listed entity within the Industry, Innovation and Science portfolio.

Geoscience Australia is Australia's national geoscience organisation and exists to apply geoscience to Australia's most important challenges. Geoscience Australia provides geoscientific advice and information to the Australian Government to support it to deliver its priorities. Geoscience Australia also provides geoscientific information to industry, the community and other stakeholders where it supports achievement of Australian Government objectives.

Geoscience Australia values diversity in the gender, backgrounds, culture, and experiences of our employees and is dedicated to providing an inclusive workplace culture that ensures everyone has equal opportunity to contribute, participate and progress.

Geoscience Australia is committed to the health, safety and wellbeing of its employees and has a work health and safety management system that incorporates a wellness program.

Role description:

The Geodesy Section, within the Community Safety and Earth Monitoring Division, is responsible for the geodetic national positioning infrastructure which includes the national coordinate system. This role is for an early-career geoscientist with expertise in remote-sensing using Interferometric Synthetic Aperture Radar (InSAR) for measuring crustal deformation processes. Under direct supervision of the Team Leader - InSAR, the position will involve producing crustal deformation maps using InSAR for ongoing monitoring of resource extraction and developing novel techniques to process large volumes of SAR data to support the activities of the Geodesy Section and other relevant geoscience applications.

Role duties:

In this role you will:

- develop highly specialist interferometric processing tools and applications to enable batch processing of large-scale SAR datasets on high performance computing infrastructure;
- problem solve very complex technical issues including the interpretation of InSAR products and derivation of local and regional crustal deformation models;
- undertake research towards combining InSAR observations with other geodetic measurements to support the next generation Australian geodetic datum;
- develop and implement plans for the InSAR capability and contribute to strategic planning for longer-term initiatives;

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- promote, negotiate and broker agreements and collaborations with external stakeholders in Australia and the region.

Special requirements:

A doctoral degree with at least three years' experience of interferometric processing of remotely sensed radar data. Other desirable experience includes: combination of InSAR and GNSS/levelling datasets; persistent scatterer analysis; computer programming, particularly with Python; data modelling and interpretation of InSAR products; handling of large datasets; a demonstrated ability to undertake scientific research with minimal supervision. The individual will be required to present outcomes of their work at selected conferences or forums, and travel to undertake field work as required.

Key relationships:

Internal: Team Leader – InSAR, Section Leader - Geodesy, Head – Geodesy and Seismic Monitoring Branch. The individual will work in a small team and possess the skills to communicate and relate well with other team members and stakeholders across the agency.

External: State and Territory governments, international space agencies, InSAR scientists throughout Australasia.

Selection criteria:

Geoscience Australia uses a competitive selection process to fill jobs, based on an assessment of candidates' work-related qualities and those qualities required to perform the duties, and on the capacity to achieve outcomes related to the duties, as reflected in this role profile.

Please describe your skills and experiences against the following selection criteria in relation to the role profile in a maximum of 750 words (total).

1. A proven ability to undertake complex InSAR research and develop innovative algorithms for InSAR analysis
2. A proven ability to work in a small team and manage resources to meet and exceed service level standards in a busy work environment
3. A proven ability to work with stakeholders
4. An ability to contribute the strategic direction of the Agency's InSAR activity

The **STAR** model is one way of presenting information against selection criteria. For each criterion think about the following and use examples that are **recent**, **relevant** and at the **appropriate complexity** to demonstrate your suitability for this role:

Situation - Set the context by describing the circumstance where you used the skills or qualities and gained the experience.

Task - What was your role?

Actions - What did you do and how did you do it?

Results - What did you achieve? What was the end result and how does it relate to the job you are applying for?

The Australian Public Service Commission provide some further guidance at <http://www.apsc.gov.au/publications-and-media/current-publications/cracking-the-code/factsheet5>

If you are unsure about the expectations required at this level, you can refer to the GA Work Level Standards and Capability Framework, available from our website.

If you have any questions about this role, please feel free to contact the person listed below.

Contact Officer: Nicholas Brown
Contact Officer Phone: (02) 6249 9831
Contact Officer Email: Nicholas.Brown@ga.gov.au

Please ensure that you **complete your application on eRecruitment** before midnight Canberra time on the nominated date of closing. The eRecruitment system closes automatically at this time, and will not allow you to make any changes after that time.

Emailed applications will NOT be accepted. If you experience any problems using the eRecruitment system, please contact recruitment@ga.gov.au PRIOR to the position closing.